ABSTRACT

A diaphragm cover apparatus and method for a sensor are disclosed. A sensor cover is located proximate to a base. A dimple can be located centrally within the cover, wherein the dimple comprises a component that is separate from the sensor cover and diaphragm. The dimple contacts a sense element of the sensor. Additionally, a foil can be adapted for use in blocking air permeation through the sensor diaphragm, when the sensor experiences pressure. An over mold diaphragm is generally located as part of the sensor cover. The dimple itself comprises a highly polished surface to reduce stress concentrators from contacting the sense element. The dimple can be formed from materials such as stainless steel, ceramic and the like to optimize the performance of the sensor.

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